# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

## SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES

## UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR SCIENCE IN BIOLOGICAL SCIENCES

## 3RD YEAR 2ND SEMESTER 2018/2019 ACADEMIC YEAR

### MAIN CAMPUS - REGULAR

**COURSE CODE:** SBI 3318

**COURSE TITLE:** PROTOZOOLOGY

**EXAM VENUE:** LR 1 STREAM (BIO)

**DATE:** 17/04/2019 EXAM SESSION: 3.00-5.00PM

**TIME: 2 HOURS**

**Instructions:**

1. **Answer ALL questions in Section A and Any two questions in Section B**
2. **Candidates are advised not to write on question paper**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room**

**SECTION A: SHORT ANWER QUESTIONS (30 MARKS)**

1. Giving examples, state three characteristics that can be used to classify protozoans.

   (3 marks)

2. Describe three extra-intestinal pathologies associated with *Entamoeba histolytica*.

   (3 marks)

3. State six clinical symptoms of Babesiosis.                    (3 marks)

4. Outline three morphological differences in the two life cyle stages of *Giardia lamblia*.

   (3 marks)

5. State six morphological characteristic of *Toxoplasma gondii* oocyst.    (3 marks)

6. Giving specific examples, name any three important species of Leishmania and the diseases that they cause.                                      (3 marks)

7. State six ways of controlling and preventing infection by protozoans.       (3 marks)

8. Outline three major differences between *Trypanosoma brucei gambiense* and *Trypanosoma brucei rhodesiense*.                                  (3 marks)

9. State six pathologies associated with *Trichomonas vaginalis*.        (3 marks)

10. State the infective stage, diagnostic stage and habitat of *Blantidium coli*.    (3 marks)

**SECTION B: ESSAY QUESTIONS (40 MARKS)**

11. Describe the epidemiology, vector, life cycle of the causative parasites, clinical symptoms and diagnosis of malaria.                            (20 marks)

12. Giving specific examples, describe the effect of protozoan parasites on their host.

    (20 marks)

13. "Ecological niches and routes of infection of protozoan parasites determine the type of samples to be collected for laboratory diagnosis". Discuss this statement.    (20 marks)

14. With specific examples, discuss the economic importance of protozoa.      (20 marks)